

**27 February 2002**

**Status Report on Civil Works Activities  
In the Great Lakes and Ohio River Division  
FY 2003**

**Brigadier General Steven R. Hawkins, Division Engineer**

**AREA OF RESPONSIBILITY**

The Great Lakes and Ohio River Division (LRD) serves the water resources needs of all or parts of 17 states, covering approximately 335,000 square miles, with a population of 56 million. Implementation of the Civil Works program is conducted through seven district offices, located in Chicago, Illinois; Louisville, Kentucky; Detroit, Michigan; Buffalo, New York; Pittsburgh, Pennsylvania; Nashville, Tennessee; and Huntington, West Virginia. The Great Lakes and Ohio River Division Headquarters, located in Cincinnati, Ohio, provides management and oversight.

The division includes the U.S. portion of the Great Lakes watershed and St. Lawrence River and the Ohio River watershed. Flood damage reduction projects have prevented an estimated \$17 billion in cumulative basin-wide flood damages. Nearly 900 megawatts of hydroelectric power capacity exist at 10 Corps hydroelectric power plants. An estimated 100 million visitors enjoyed recreation experiences at 129 Corps lakes and navigation pools in the region. Last year over 275 million tons of commodities were shipped through Corps operated lock facilities on the Ohio River and its navigable tributaries. Total annual commerce on the Great Lakes averages 188 million tons. Opportunities also are being explored to restore aquatic and upland ecosystems from the adverse effects of acid mine drainage, untreated sewage contamination, water-related urban pollution, and other human activities that modify the environment.

**SUMMARY OF FY 2003 PROGRAM**

The FY 2003 Federal Budget request includes \$616.7 million for 25 studies, 25 construction projects and continued operation and maintenance of 162 projects plus inspection of completed works and protection of navigation activities. The FY 2003 program will enable the Great Lakes and Ohio River Division to continue the General Investigations and Construction, General programs and meet essential requirements for Operation and Maintenance activities.

The FY 2003 request is a decrease of \$52.0 million from the FY 2002 allocation. This net reduction includes a decrease of \$0.8 million in the General Investigation appropriation, a decrease of \$66.8 million in the Construction, General appropriation, and a increase of \$15.6 million in the Operation and Maintenance, General appropriation.

The FY 2003 budget request is detailed in the table below. Each appropriation category will be addressed in turn.

**Comparison of FY 2001 Execution, FY 2002 Allocations,  
and FY 2003 Budget Request**

<b>APPROPRIATION CATEGORY</b>	<b>FY 2001 Execution \$ million</b>	<b>FY 2002 BUDGET ALLOCATION \$ million</b>	<b>FY 2003 BUDGET REQUEST \$ million</b>
<b>GI</b>	<b>16.9</b>	<b>\$11.5</b>	<b>\$10.6</b>
<b>CG/IWTF *</b>	<b>351.7</b>	<b>323.6</b>	<b>256.8</b>
<b>O&amp;M</b>	<b>355.5</b>	<b>333.6</b>	<b>349.2</b>
<b>TOTAL</b>	<b>\$724.1</b>	<b>\$668.7</b>	<b>\$616.6</b>

**\* Includes funds from the Inland Waterways Trust Fund (IWTF).**

## GENERAL INVESTIGATIONS

### HIGHLIGHTS OF FY 2001, FY 2002

The Great Lakes and Ohio River Division expended \$16.9 million for General Investigation in FY 2001; six Reconnaissance Reports and two Feasibility Reports were completed. In FY 2002, \$17.8 million is scheduled for expenditure; eight Reconnaissance reports and three Feasibility Reports are scheduled to be completed.

### BUDGET REQUEST FOR FY 2003

The **General Investigations** request of \$10.6 million provides funds for 19 surveys and 6 preconstruction engineering and design (PED) activities.

	START	CONTINUE	COMPLETE	FY 2003 \$
SURVEYS	0	18	1	\$6.7 M
PRECONSTRUCTION ENGINEERING & DESIGN	0	5	1	3.9 M
TOTAL	0	23	2	\$10.6 M

## **Navigation Studies**

The FY 2003 budget contains \$3,375,000 to continue two navigation studies (Ohio River Mainstem Systems Study and Great Lakes Navigation System).

### **Ohio River Mainstem Systems Study, KY, IL, IN, OH, PA and WV**

The Ohio River Mainstem Systems Study area encompasses the 981-mile length of the Ohio River from Pittsburgh, PA, to the mouth near Cairo, IL. The existing Ohio River navigation system consists of 20 locks and dam structures, which will be reduced to 19 upon completion of Olmsted Locks and Dam currently under construction. The purpose of the Systems Study is to develop the optimum investment strategy for operation and maintenance, major maintenance, major rehabilitation, and new construction investments in the system. The study will result in an authorization document for near-term actions and a master plan for long-term improvements to the Ohio River navigation system. FY 2003 funds of \$3,000,000 will be used to continue engineering, economic and environmental system analyses.

### **Great Lakes Navigation System, MI, IL, IN, MN, NY, OH, PA and WI**

The Great Lakes together with the St. Lawrence Seaway provide a continuous 2,400-mile deep draft waterway that extends from the western end of Lake Superior to the Gulf of St. Lawrence. The U.S. portion includes 136 harbors of which 71 are commercial, seven locks, 138 miles of breakwater and jetties, and over 600 miles of 27-foot deep draft navigation channel. The Great Lakes Navigation Systems review will identify the factors and trends that affect the character of the existing system and project future trends. This will include an evaluation of present and future commodity flows and the external factors that affect them. It will also include a determination of the potential for national and regional economic development, environmental and institutional impacts with a view toward whether or not a detailed feasibility study should be undertaken. If the review determines that there is a Federal interest in capital improvements, a follow-on feasibility study would quantify system capacity constraints and corresponding modifications to improve overall efficiency. FY 2003 funds of \$375,000 will be used to continue into the feasibility phase. The feasibility is scheduled to be completed in September 2006.

## **Flood Damage Prevention Studies**

FY 2003 funding of \$1,350,000 is requested to continue six flood damage prevention studies.

### **Des Plaines River, IL and WI (Phase II)**

The Des Plaines River basin has a history of flooding, which has caused significant economic losses. The Feasibility Cost Sharing Agreement is currently scheduled to be executed in February 2002. The FY 2003 budget request of \$335,000 will be used to continue the feasibility study of those areas not addressed in Phase I.

### **Metropolitan Louisville, Mill Creek Basin, KY**

The study area lies in the southwestern portion of Jefferson County and represents the fourth in a series of watershed studies of the Metropolitan Louisville area. There are nearly 3,300 homes and businesses with an estimated value in excess of \$100 million that are subject to flooding from local streams. The Feasibility Cost Sharing Agreement is scheduled to be executed in April 2002. FY 2003 funds of \$187,000 will be used to continue the feasibility study efforts.

### **Metropolitan Louisville, Southwest, KY**

The study area encompasses a drainage area of approximately 24 square miles in the western and southern sections of Louisville, KY. Flooding in March 1997 resulted in damage to 5,000 residential and commercial structures in the study area. The Feasibility Cost Sharing Agreement was executed in June 1999. FY 2003 funds of \$140,000 will be used to continue the feasibility phase.

### **Butler County, OH**

Butler County lies in southwestern Ohio. The most recent flooding in the county occurred in March 1997 with damages estimated at \$20,000,000. In addition to addressing the flood problem the study will assess opportunities for ecosystem restoration and restoration of wetlands. The reconnaissance phase is scheduled to be completed in March 2002. The FY 2003 budget amount of \$243,000 will be used to continue the feasibility phase study efforts.

### **Davidson County, Mill Creek Watershed, TN**

Davidson County encompasses metropolitan Nashville, Tennessee. Flood damages in the Nashville area resulting from the May 1979 flood were estimated at \$93,000,000 in 2000 dollars. Mill Creek is a major tributary of the Cumberland River in southeastern Davidson County and northwestern Williamson County. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2002. The FY 2003 budget amount of \$240,000 will be used to continue the feasibility phase, if warranted by the results of the reconnaissance study.

### **French Broad Watershed, TN**

French Broad watershed encompasses five counties in eastern Tennessee. The study will address the regions' needs for flood control, water supply, wastewater treatment, fish and wildlife enhancement, water quality, and ecosystem restoration. The Feasibility Cost Sharing Agreement was executed in October 2000. The FY 2003 budget amount of \$205,000 will be used to continue the feasibility phase of the study.

### **Special Studies**

FY 2003 funding of \$1,943,000 is requested to continue ten special studies and complete one special study (Hocking River Basin Environmental Restoration, Monday Creek, OH).

### **Indiana Harbor, IN**

The Indiana Harbor study area is located in northwest Indiana in the communities of Gary, East Chicago, and Hammond. The study area covers 15.4 river miles, including the Indiana portion of the Grand Calumet River (except an area to be cleaned up by United States Steel) and portions of the Lake George Canal and the Calumet Canal that are not part of the Federal navigation channel. The study will examine restoration or clean up of the area, which contains approximately two million cubic yards of highly contaminated sediments. The Feasibility Cost Sharing Agreement is scheduled to be executed in April 2002. The FY 2003 budget includes \$248,000 to continue the feasibility phase.

### **Metropolitan Region of Louisville, Jefferson County, KY**

The study area encompasses a drainage area of approximately 386 square miles in the Metropolitan Region of Louisville, KY, and extends over six counties in Indiana and Kentucky. The study will examine drainage and flood damage reduction efforts, linked to restoration of natural floodplain values and other measures. A Feasibility Cost Sharing Agreement with the Louisville and Jefferson County Metropolitan Sewer District is scheduled to be executed in April 2002. FY 2003 funds of \$225,000 will be used to continue the feasibility phase study efforts.

### **Onondaga Lake, NY**

Onondaga Lake, located at Syracuse, New York, is part of the New York State Barge Canal and Oswego River Systems. The FY 2003 budget request of \$300,000 will be used in support of the partnership established by the Water Resource Development Act of 1999. The purpose of the partnership is to seek remedies to the severe water quality problems of Onondaga Lake.

### **Columbus Metropolitan Area, Lower Big Darby Creek Basin Environmental Restoration, OH**

The Columbus metropolitan statistical area is the third largest metropolitan area in the state and is experiencing significant growth. Rapid industrial and commercial growth and increased residential construction have caused hydrological changes and contributed to the increased runoff and frequency of flooding in the City of Columbus and surrounding area. FY 2003 funds of \$100,000 will be used to continue work on the feasibility study.

**Hocking River Basin Environmental Restoration,  
Monday Creek, OH  
and  
Hocking River Basin Environmental Restoration,  
Sunday Creek, OH**

Monday Creek and Sunday Creek are two watersheds of the Hocking River Basin in Perry, Athens, Hocking and Morgan Counties, Ohio. Extensive portions of the two watersheds have been subjected to underground and surface mining. Severe acid mine drainage problems occur and erosion from disturbed land areas have accelerated sedimentation and deposition of materials in the streams in these watersheds. The reconnaissance report recommended separate studies of Monday Creek and Sunday Creek to evaluate the applicability of various restoration solutions to the overall degradation of the ecosystem. The FY 2003 funds of \$205,000 will be used for Monday Creek to complete the feasibility phase in September 2003. FY 2003 funds of \$225,000 will be used for Sunday Creek to continue feasibility phase studies.

**Mahoning River Environmental Dredging, OH**

The Mahoning River Basin covers approximately 1,132 square miles in northeastern Ohio and west central Pennsylvania. This study addresses measures for the removal and remediation of contaminated sediments from the river. The Eastgate Regional Council of Governments has indicated their interest in sponsoring a feasibility study of the Ohio portion of the river, and a feasibility Cost Sharing Agreement is scheduled to be executed in 2002. The feasibility study is scheduled to be initiated in FY 2002. FY 2003 funds of \$40,000 will be used to continue the feasibility study. The feasibility study is scheduled for completion in September 2005.

**Muskingum Basin System, Dillon Lake, OH**

The Muskingum Basin study area encompasses 8,051 square miles in southeastern Ohio. Within the Muskingum Basin, the upper reaches of Dillon Lake are significantly impacted by sedimentation resulting in aquatic habitat degradation. The Ohio Department of Natural Resources has indicated their interest in a feasibility study of Dillon Lake, and a feasibility Cost Sharing Agreement is scheduled to be executed in 2002. FY 2003 funds of \$225,000 will be used to continue the feasibility study. The feasibility study is scheduled for completion in September 2005.



### **New River Basin, Stroubles Creek, VA**

The New River Basin reconnaissance study examined various measures to restore the stressed and damaged ecosystem. One of the locations examined was the Stroubles Creek watershed that is located in Montgomery County, Virginia and lies partially within the cities of Radford and Blacksburg, Virginia. A feasibility study of Stroubles Creek would further identify specific flooding problems in the watershed for which feasible alternatives could be formulated and assess the extent of ongoing damages to the stream corridor environment due to high flows and runoff. A Feasibility Cost Sharing Agreement is scheduled for execution in March 2002. The FY 2003 funds of \$235,000 will be used to continue the feasibility study of the Stroubles Creek watershed. The feasibility study is scheduled for completion in September 2005.

### **Powell River Watershed, VA**

The Powell River originates in southwest Virginia and flows across the Tennessee border where it empties into the Clinch River. The study will develop a watershed management plan, which will evaluate various measures to restore the stressed and damaged ecosystem. FY 2003 budgeted funds of \$100,000 will be used to complete the Interim report for Straight, Reeds, Jones, and Cox Creeks, and continue the Interim report for Bundy Creek, Craborchard Creek, Pigeon Creek, and Jordan Branch.

### **Fox River Environmental Dredging, WI**

The study area encompasses the Lower Fox River in Wisconsin, which is a 39-mile segment of the Fox River from Lake Winnebago to Green Bay Harbor. The ecosystem of the Fox River has been contaminated in a number of areas, and the study will examine the removal of contaminated sediments. The Wisconsin Department of Natural Resources has indicated their interest in sponsoring the work. FY 2003 funds of \$40,000 will be used to initiate the feasibility study. The feasibility study is scheduled for completion in September 2005.

## **PRECONSTRUCTION ENGINEERING AND DESIGN**

The FY 2003 budget request includes \$3,957,000 to continue five preconstruction engineering and design (PED) projects and complete one project (Island Creek at Logan, WV).

### **Navigation**

The FY 2003 budget request includes \$3,100,000 for four navigation projects.

#### **Waukegan Harbor, IL**

Waukegan Harbor is located on the western shore of Lake Michigan approximately 38 miles north of Chicago, Illinois. The project will deepen the harbor to accommodate fully loaded vessels (21.5-foot draft). Total project cost is estimated at \$23.0 million. The FY 2003 budget request of \$200,000 will be used to continue PED. PED is scheduled for completion in September 2006.

#### **John T. Myers Locks and Dam, IN and KY**

The John T. Myers Locks and Dam project is located on the Ohio River, 846 miles below Pittsburgh, Pennsylvania. Tonnage projections indicate that the John T. Myers lock will be the next potential bottleneck on the lower reach of the Ohio River mainstem system once the Olmsted Lock is completed. Construction is estimated to cost \$225.0 million. The project was authorized for construction in the Water Resource Development Act (WRDA) of 2000. The FY 2003 budget request of \$1,346,000 will be used to continue PED for a 600-foot extension of the existing auxiliary lock chamber resulting in a 110 by 1200-foot chamber. PED is scheduled for completion in September 2005.

#### **Greenup Locks and Dam, KY and OH**

Greenup Locks and Dam is located on the left descending bank of the Ohio River near Greenup, Kentucky, 341 miles downstream from Pittsburgh. The project includes a 600-foot extension of the existing auxiliary lock chamber resulting in a 110 by 1,200-foot chamber. Construction is estimated to cost \$240.7 million. The project was authorized for construction under WRDA 2000. The FY 2003 budget amount of \$1,302,000 will be used to continue PED efforts. PED is scheduled for completion in September 2004.

### **Chickamauga Lock, TN**

Chickamauga Lock is located 7 miles northeast of Chattanooga at Mile 471 on the Tennessee River. The structural integrity of the current lock is impacted by an alkali aggregate reaction in the lock's concrete. Construction of a replacement lock is estimated to cost \$239.4 million (October 2001 prices). The FY 2003 budget amount of \$252,000 will be used to continue PED activities. PED is scheduled for completion in March 2006.

### **Flood Control**

The FY 2003 budget request includes \$697,000 for one flood control project.

### **Island Creek at Logan, WV**

The Island Creek at Logan, WV, project provides for channelization of the lower 0.7 miles of Island Creek. Total project cost is estimated at \$23.4 million. The Water Resource Development Act of 1986 authorized the project for construction. The FY 2003 budget amount of \$697,000 will be used to complete PED. PED is scheduled for completion in September 2003.

### **Watershed / Ecosystem**

The FY 2003 budget request includes \$160,000 for one watershed/ecosystem project.

### **Ashtabula River Environmental Dredging, OH**

The Ashtabula River is located on the south shore of Lake Erie, 59 miles east of Cleveland, Ohio. The PED project will develop plans for remediation of contaminated sediments in the Ashtabula River and Harbor system. Construction is estimated to cost \$42.4 million. The FY 2003 budget request of \$160,000 will be used to continue PED efforts. PED is scheduled for completion in September 2004.

## **CONSTRUCTION, GENERAL**

### **HIGHLIGHTS OF FY 2001, FY 2002**

The Great Lakes and Ohio River Division expended \$351.7 million for Construction General projects in FY 2001.

In FY 2002, \$359.7 million is currently scheduled for expenditure. Construction will be continued for navigation, flood damage reduction (structural and nonstructural), shoreline protection, beach nourishment, environmental restoration, dam safety, major rehabilitation (navigation and flood damage reduction), recreation and infrastructure improvements.

### **BUDGET REQUEST FOR FY 2003**

In FY 2003, \$256.8 million for the Construction General program will be used for 25 projects.

	# PROJECTS	FY 2003 AMOUNT \$ millions
Navigation	8	\$ 166.1
Shoreline Protection	2	19.6
Flood Damage Reduction	11	43.0
Dam Safety Assurance / Major Rehabilitation	4	28.1
Total	25	\$256.8

\* Includes \$85.6 million from the Inland Waterways Trust Fund (IWTF).

## **Navigation**

Funds in the FY 2003 request will be used to continue eight navigation projects.

### **Olmsted Locks and Dam, Ohio River, IL, KY**

Construction is underway on the Olmsted Locks and Dam which will replace the 66 year-old Locks and Dams 52 and 53 on the lower Ohio River. The \$1.060 billion project, located near Olmsted, IL, will provide twin 110 by 1,200-foot locks and a dam with a navigable pass that will allow traffic to pass about 58 percent of the time without locking. FY 2003 funds of \$77,000,000 will be used to complete approach wall construction, continue bulkhead construction, and initiate construction for downstream mooring cells, gate storage facility, and the dam. The project is currently 50 percent complete.

### **Indiana Harbor, IN (Confined Disposal Facility)**

The FY 2003 budget of \$6,800,000 will be used to continue design and construction of a Confined Disposal Facility (CDF) at Indiana Harbor, IN, to contain 4.8 million cubic yards of dredged material which is unsuitable for open lake disposal. The total cost estimate for the project is \$134 million.

### **Kentucky Lock, Tennessee River, KY**

The Kentucky Lock and Dam is located at mile 22.4 on the Tennessee River near Grand Rivers, KY. The project provides for construction of a new 110 by 1,200-foot lock chamber, a new railroad bridge, and a new highway bridge. The total cost estimate for the project is \$533 million. FY 2003 funds of \$27,400,000 will be used to continue project design and construction. Construction is currently 13 percent complete.

### **McAlpine Locks and Dam, Ohio River, KY, IN**

At McAlpine Locks and Dam, located on the Ohio River at Louisville, KY, the obsolete 110 by 600-foot auxiliary lock chamber will be replaced with a new 110 by 1,200-foot lock at an estimated cost of \$278 million. The new lock will complement an existing lock to provide twin 1,200-foot locks for tow traffic. Construction is currently 23 percent complete. FY 2003 funds of \$6,192,000 will be used to complete cofferdam construction and continue project design.

### **Locks and Dams 2, 3, and 4, Monongahela River, PA**

Locks and Dams 2, 3 and 4, located between river miles 11.2 and 41.5 upstream of Pittsburgh, PA are the last of the old, undersized structures on the Monongahela River. Age, deterioration, structural instability, and undersized locks are diminishing system reliability, resulting in frequent and long interruptions of navigation. The project includes replacement of the existing Dam 2 with a new gated dam and rehabilitation of the auxiliary Lock 2 chamber floodway bulkhead structure; removal of Locks and Dam 3; and construction of new twin 84 by 720-foot locks at Locks and Dam 4. The total project cost is estimated at \$750 million. The project is currently 29 percent complete. FY 2003 funds of \$36,017,000 will be used to continue real estate acquisition, municipal relocations, project construction, and continue design.

### **Marmet Locks and Dam, Kanawha River, WV**

Marmet Locks and Dam project is located on the Kanawha River 68 miles upstream of its confluence with the Ohio River. An additional 110 by 800-foot lock chamber landward of the existing locks has been authorized for construction. A total of 216 real estate tracts will be acquired along with some 250 homes and businesses. The total project cost is estimated at \$313 million. Construction is currently 17 percent complete. The FY 2003 budget request of \$10,978,000 will be used to complete real estate acquisition and relocations, continue lock construction and project design.

### **Robert C. Byrd Locks and Dam, Ohio River, WV, OH**

The old locks at the Robert C. Byrd Locks and Dam on the Ohio River have been replaced with two new locks, 110 by 1,200 feet and 110 by 600 feet. The new locks became operational in January 1993. In addition to the new locks, the project includes rehabilitation of the existing roller gated dam originally constructed in 1937. Total project cost is estimated at \$381 million. FY 2003 funds of \$1,500,000 will continue dam rehabilitation and fish and wildlife mitigation activities. The project is currently 97 percent complete.

### **Winfield Locks and Dam, Kanawha River, WV**

Modernization of Winfield Locks and Dam on the Kanawha River includes construction of an additional 110 by 800-foot lock chamber, located landward of the existing locks, and a 110-foot wide non-navigable gate bay. The total project cost is estimated at \$235.9 million. FY 2003 funds of \$200,000 will provide for design of mitigation features. The project is currently 98 percent complete.

## **Shoreline Protection**

FY 2003 funds will continue work at two shoreline protection projects.

### **Chicago Shoreline, IL**

The Chicago Shoreline, IL, project will provide shoreline protection for 11 miles of publicly owned shoreline within the City of Chicago. The total estimated project cost is \$300 million. The FY 2003 budget request of \$19,000,000 will be used to continue construction in Reach 2 and Reach 4 and project design. Construction is currently 39 percent complete.

### **Presque Isle Peninsula, PA**

Initial construction of the Presque Isle Peninsula project at Erie, PA, was completed in November 1992 consisting of a system of 55 offshore rubble mound breakwaters along the peninsula and placement of approximately one half million tons of beach sand fill. The project also includes a periodic nourishment program for 50 years. The estimated total project cost is \$133.2 million. FY 2003 funds, \$580,000, will be used to place the eleventh year of post-construction beach nourishment.

## **Flood Damage Reduction**

Funds in the FY 2003 budget request will be used to continue construction of eleven flood damage reduction projects.

### **McCook and Thornton Reservoirs, IL**

The McCook and Thornton reservoir elements are part of the greater Chicago Tunnel and Reservoir Plan. The project area covers 341 square miles in the City of Chicago and 48 adjacent suburbs. An estimated 180,000 structures are subject to annual flooding. The total estimated project cost is \$684 million. The FY 2003 funds of \$10,000,000 will be used to continue engineering and design and construction.

### **Indianapolis (North), IN**

The Indianapolis (North) project includes construction of three miles of levee and floodwall on the east bank of the White River in Indianapolis. The total cost estimate for the project is \$17.1 million. The project is currently 10 percent complete. FY 2003 funds of \$2,000,000 will be used to continue construction.

### **Little Calumet River, IN**

The Little Calumet River, IN, flood control project will provide flood protection to 8,600 residential structures in Gary, Griffith, Hammond, Highland, and Munster, IN. The \$194 million project includes construction of 22 miles of urban levees and floodwalls along with pumping plant modifications, channel modification and structural floodproofing and removal. The FY 2003 budget request of \$3,562,000 will be used to continue design and construction. Construction is currently 55 percent complete.

### **Ohio River Greenway Corridor, IN (Flood Control)**

Features of the Ohio River Greenway, IN, project include construction of a vehicular parkway, pedestrian and multi-use paths, a bridge, and two levee cuts to provide access to the Ohio River in the vicinity of the local flood protection project which was constructed between 1937 and 1953. Construction is estimated to cost \$35 million. The FY 2003 funds of \$732,000 will be used to continue construction of the demonstration project at Clarksville, IN. Construction is currently 6 percent complete.

### **Metropolitan Louisville, Beargrass Creek, KY**

The Beargrass Creek project is located in eastern Jefferson County in the suburbs of Louisville, KY. The project consists of construction of eight detention basins, channel improvements, and floodwall/levee on the South Fork of Beargrass Creek and Buechel Branch. The project will provide protection to 830 structures. The 100-year flood will be reduced by an average of 1.5 feet as a result of project implementation, which will result in 314 structures no longer being classified as located within the 100-year floodplain. The total project cost is \$12.4 million. In FY2003, \$3,838,000 will be used to continue construction. Construction is currently 20 per cent complete.

### **Metropolitan Louisville, Pond Creek, KY**

The Pond Creek project is located in southern Jefferson County, KY. The project consists of construction of detention basin storage and channel enlargement along approximately 2.4 miles of Pond Creek and 1.5 miles of a tributary (Northern Ditch). A 15-acre wetland environmental restoration component and a multipurpose maintenance road/hiking trail along the channel are also included in the project. The total project cost is \$19.3 million. The project will result in approximately 1,600 structures no longer being classified as located within the 100-year floodplain. Additional structures will benefit from reduced frequency and depth of flooding. In FY 2003, \$2,000,000 will be used to continue channel construction along Pond Creek. Construction is currently 66 percent complete.



### **Metropolitan Region of Cincinnati, Duck Creek, OH**

Duck Creek is located in the City of Cincinnati and the Village of Fairfax, OH. The \$37.1 million flood control project consists of channel enlargement and relocation, levees, floodwalls, one pump station, and environmental mitigation. The completed project will provide 100-year level of protection to existing commercial, industrial and residential areas along Duck Creek. FY 2003 funds of \$3,270,000 will be used to continue construction. Construction is currently 18 percent complete.

### **Mill Creek, OH**

The project is located along a 17.5 mile reach of the Mill Creek in Hamilton County, OH. Much of the project is within the commercial and industrial heart of Cincinnati, Ohio. The project has a total estimated cost of \$214.2 million and is currently 62 percent complete. FY 2003 funds include \$1,100,000 to continue the General Reevaluation Report and construction of the Section 3 Punch List items.

### **West Columbus, OH**

The \$129.4 million West Columbus, OH, project consists of 5.2 miles of levee and floodwall, two new pump stations, modifications of two existing pump stations, and 14 gate closures. FY 2003 funds of \$2,000,000 will be used to continue construction of levees and floodwalls. Construction is currently 79 percent complete.

### **Saw Mill Run, Pittsburgh, PA**

The \$17.8 million Saw Mill Run, PA, project consists of 4,700 feet of channel deepening, realignment, and streambank stabilization. FY 2003 funds of \$4,103,000 will be used to complete construction. The project is currently 25 percent complete.

### **Levisa and Tug Forks of the Big Sandy River and the Upper Cumberland River, WV, VA, KY (Section 202) Grundy, VA Element of Section 202**

The Grundy flood damage reduction project, located in southwestern Virginia in the upper reaches of the Levisa Fork basin, will be constructed in cooperation with a major highway relocation project by the Virginia Department of Transportation. Major features of the flood control project include a structural floodwall to protect the central business district, relocation of two schools and fire station, construction of a flood-safe commercial development site, and voluntary flood proofing and acquisition. FY 2003 funds of \$10,400,000 will be used to continue land acquisition, relocations, voluntary floodproofing and acquisition, and construction of the Grundy subproject.

### **Dam Safety Assurance and Major Rehabilitation**

Funds in the FY 2003 request will be used to complete construction of one projects and continue construction on three projects.

#### **Mississinewa Lake, IN (Major Rehabilitation)**

The Mississinewa Lake is located in north central Indiana. The project was placed in operation in October 1967. Recent subsurface investigations have revealed an 0.8 feet settlement of a portion of the dam. The dam is stable at this time, however, the settlement is continuing which may lead to possible dam failure. The rehabilitation project includes placement of a 2,600-foot long cutoff wall. The total cost of the project is estimated at \$40 million. FY 2003 funds of \$7,094,000 will be used to continue construction. The project is currently 5 percent complete.

#### **Dewey Lake, KY (Dam Safety Assurance)**

The Dam Safety Assurance project at Dewey Lake includes raising the height of the dam by three feet and modifying the existing spillway to maintain design capacity and reduce the risk of dam failure. The total cost of the project modification is estimated at \$18.6 million. FY 2003 funds of \$600,000 will be used to continue construction. The project is currently 80 percent complete.

#### **Bluestone Lake, WV (Dam Safety Assurance)**

Bluestone Lake, WV, is located in southern West Virginia, in Summers County. The height of the dam is to be raised by 8 feet, a flood gate structure will be constructed, and the hydropower penstocks will be retrofitted with gates. The total cost of the Dam Safety Assurance project modification is estimated at \$118 million. In FY 2003, \$8,500,000 will be used to continue construction. The project is currently 18 percent complete.

#### **London L&D, WV (Major Rehabilitation)**

The London Locks and Dam project, located on the Kanawha River 82.8 miles upstream of its confluence with the Ohio River, includes major rehabilitation of the existing locks and dam and extension of the riverward lock chamber by 47 feet for a total length of 407 feet. The total cost of the project is estimated as \$22.9 million. In FY 2003, \$11,934,000 will be used to complete construction. The project is currently 35 percent complete.

## **OPERATION AND MAINTENANCE, GENERAL**

### **HIGHLIGHTS OF FY 2001, FY 2002**

In FY 2001 the division expended \$355.5 million for Operation and Maintenance activities. Maintenance activities completed in FY 2001 included:

Delivery of the Henry M. Schrive derrick boat capable of lifting 350 ton miter gates at a 110 ft radius. The Gate assembly is nearly complete at McAlpine Lock. Repairs which include miter gate, culvert valve and gate machinery repairs at the following locks: Montgomery, Locks 2 & 3, Allegheny River, Emsworth, Hannibal, Lock 4, Monongahela, Pike Island, Maxwell and Poe Locks on the St. Mary's River, MI. Repairs continue at Chickamauga Lock on the Tennessee River.

The FY 2002 funds allocation for the Operation and Maintenance program is \$334,353,000.

Significant maintenance activities scheduled for FY 2002 include:

Repairs, which include miter gate, culvert valves and gate machinery repairs at the following Locks: Markland, Newburgh, Cannelton, Lock 52, Meldahl, Winfield, London, Morgantown, Maxwell, Pike Island, MacArthur Lock, Lock 4 Monongahela River, Montgomery, Lock 2 Allegheny River, Dashields and New Cumberland. Complete the gate assembly at McAlpine Lock and Dam. Continue repair at Chickamauga Lock on the Tennessee River. Dredging at the following: Cleveland Harbor/Cuyahoga, Fairport Harbor, Huron Harbor, Sandusky Harbor and Toledo Harbor/Maumee River in Ohio; Dunkirk Harbor in New York; Michigan City harbor in Indiana; Waukegon Harbor in Illinois; Big Suamico Harbor, Green bay Harbor, Manitowoc Harbor, Portwing Harbor and Portage lake Harbor in Wisconsin; Duluth Superior Harbor in Minnesota; Detroit River, Grand Haven Harbor (Inner and Outer), Holland Harbor, Leland Harbor, Ludington Harbor, Muskegon Harbor, Ontonagon Harbor, Pentwater Harbor, Rouge River, Saginaw River, South Haven Harbor, St. Joseph Harbor and St. Mary's River in Michigan.

### BUDGET REQUEST FOR FY 2003

The FY 2003 budget request for the Operation and Maintenance, General program is \$349.2 million. This includes \$171.8 million for operations activities and \$177.4 million for required maintenance of projects. The extent of our Operation and Maintenance budgeted activities are shown in the table below.

CATEGORY	NUMBER OF BUDGETED PROJECTS	FY 2003 BUDGET REQUEST (\$ 000)
Navigation Channels and Harbors	91	\$68,482
Navigation Locks, Dams And Canals	12	\$130,104
Flood Control Reservoirs	72	\$73,776
Flood Control Channels and Inspections	7 Channel projects plus inspection of completed works	\$2,775
Multiple Purpose Power	10	\$69,023
Protection of Navigation	Various Activities	\$5,083
TOTAL	192	\$349,243

The FY 2003 funding will not meet the critical requirements for the operation and maintenance of Corps projects. The aging projects continue to deteriorate due to unfunded maintenance. The funding for both operations activities and maintenance activities represents an increase relative to FY 2002 funding levels.

## **Navigation**

The FY 2003 program request includes \$198.6 million for 103 projects whose primary function is navigation.

Four of the Cumberland River multiple purpose projects as well as the St. Marys River multiple purpose project include navigation locks. The overall navigation responsibilities include: 96 lock facilities with 136 lock chambers; a total of 2,582 miles of inland navigation waterways on the Ohio River and its navigable tributaries; and 102 harbors in the Great Lakes region, of which 47 are deep draft harbors and 55 are shallow draft harbors. Waterborne commerce on the Ohio River and its navigable tributaries amounts to over 270 million tons, which is over one-third of the nation's waterborne commerce. Annual commerce on the Great Lakes averages 188 million tons, of which 86 million tons alone pass through the Soo Locks at the St. Marys River project.

The requested FY 2003 funding will provide for continued navigation on the Great Lakes and the Ohio River inland navigation system. FY 2003 funds will allow for much needed maintenance to major components of the navigation projects.

The budget request also includes the Protection of Navigation effort in the Great Lakes region, which encompasses Project Condition Surveys and the Surveillance of Northern Boundary Waters.

## **Flood Damage Reduction**

The FY 2003 request includes \$76.6 million for the operation and maintenance of 79 Corps projects whose primary purpose is flood control. These projects include 72 flood control reservoir projects and 7 flood control channel projects. The Muskingum River Lakes in Ohio include 14 of these flood control reservoir projects of which four, Bolivar, Dover, Mohawk and Mohicanville Dams, are used to impound water only when downstream flooding conditions are anticipated. Mt. Morris Dam is also a dry dam. In addition, seven of the Cumberland River multiple purpose projects include storage providing flood control benefits. The Tygart Lake navigation project in West Virginia also includes storage providing flood control benefits.

## **Hydropower**

FY 2003 funding of \$69.0 million has been requested for the operation and maintenance requirements of ten Multiple Purpose Power projects. These projects encompass the major Corps hydropower generation facilities in our area of responsibility, and consist of nine projects in the Cumberland River Basin plus the St. Marys River project at Sault Ste. Marie, MI. The nine Cumberland River plants have over 914 megawatts of total generating capacity and the Soo Locks plant at Sault Ste.

Marie has 21 megawatts of capacity. In addition, the Corps has a small 300 kilowatt electric power plant at the Stonewall Jackson Lake flood control project in West Virginia. Non-Federal agencies also operate hydropower facilities at Corps project sites on the Allegheny, Kanawha and Ohio Rivers, and at Youghiogheny Lake in Pennsylvania. The renewable nature of water resources makes hydropower an ideal supplemental energy resource. The Budget proposes that \$25.5 million in hydropower activities be directly funded from Power Marketing Administration Receipts.

### **Environmental Stewardship**

Corps water resource projects in our area of responsibility are geographically and ecologically diverse. Developmental pressures adjacent to project boundaries increasingly affect the environmental character of the projects and make management increasingly complex. In spite of increasing pressure, Corps projects continue to provide valuable habitat for a large number of wildlife and plant species, some of which are endangered or threatened. Cooperative partnerships have been developed with other Federal, state, and local private groups to manage these resources on a sustained basis.

During FY 2001, management activities were conducted at 43 different projects to implement the recovery plans of 14 different endangered species of flora and fauna. A total of 17,463 acres of mitigation land were managed to meet authorized requirements in the areas of fisheries, wildlife, and habitat management.

### **Recreation**

Corps projects in the 17-state area of responsibility provided recreational opportunities for large segments of the public in 2001. Corps lakes, recreational boat harbors, harbors of refuge, locks and navigation structures located both inland and on the Great Lakes, and associated navigation pools continue to provide recreational opportunities for millions of Americans and foreign visitors.

During 2001, approximately 92 million visitors recreated a total of 649 million hours at inland Corps projects alone. Additionally, during FY 2001, more than one million visits were made to visitor centers and parks located on the Great Lakes. A very large, but undocumented, number of visits were made to more than 100 recreational boat harbors, harbors of refuge and navigational structures also located on the Great Lakes. Visitors expended more than \$1.3 billion in local trip spending while engaged in recreational activities and more than 40,000 local jobs were associated with this activity. Aging facilities and increasing recreational demands are combining to create a significant and growing maintenance backlog that is presenting a challenge to be more efficient and to make greater use of cooperative efforts and volunteers. Preparations were made and are continuing in order to support and participate in Lewis and Clark Bicentennial Commemoration activities. These activities are scheduled to begin in Calendar Year 2003.

**FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM  
(FUSRAP)**

**ASHLAND 1, TONAWANDA, NY**

FY 2002 funds are being used to complete remediation of the site. FY 2003 funds will be used to close out work on the site, including backfill and restoration of remediated areas. The project completion is scheduled for FY 2003.

**SEAWAY SITE, TONAWANDA, NY**

FY 2002 funds are being used to complete a technical memorandum on characterization of Areas A, B and C. FY 2003 funds will be used to complete the Remedial Investigation/Feasibility Study and complete a Proposed Plan and release it for public review. The project completion is scheduled for FY 2007.

**LINDE SITE, TONAWANDA, NY**

FY 2002 funds are being used to continue soils remedial action, complete a Proposed Plan for groundwater, complete a Record of Decision for Building 14, and complete an RI/FS for the Tonawanda Landfill and Mudflats area. FY 2003 funds will be used to continue remedial action of radioactive contaminated soils and complete ROD's for groundwater and the Tonawanda Landfill and Mudflats area. The total project completion is scheduled for FY 2006.

**LUCKEY, OH**

FY 2002 funds are being used to continue the Feasibility Study for soils and groundwater and complete an ecological evaluation of Toussaint Creek. FY 2003 funds will be used to complete the Feasibility Study and complete public review of a Proposed Plan addressing soils and groundwater. The project completion is scheduled for FY 2008.

**NIAGARA FALLS STORAGE SITE, NY**

FY 2002 funds are being used to continue the Remedial Investigation, initiate the Feasibility Study, implement an asbestos survey and removal action in Building 401, and to continue surveillance (chemical and radiological), maintenance, and provide appropriate security at the site. FY 2003 funds will be used to complete the Remedial

Investigation/Feasibility Study, and to continue surveillance, maintenance, and appropriate security. The project completion is scheduled for FY 2011.

### **PAINESVILLE, OH**

FY 2002 funds are being used to complete the Remedial Investigation/Feasibility Study, develop/coordinate the final cleanup criteria, complete the Proposed Plan, and initiate a Record of Decision. FY 2003 funds will be used to complete the Record of Decision, develop the remedial design, and initiate and complete remedial action for the site. The project completion (close-out documentation complete) is scheduled for FY 2004.

### **HARSHAW SITE, OH**

FY 2002 funds are being used to continue the Remedial Investigation and initiate an analysis of potentially responsible parties. FY 2003 funds are being used to complete field work in support of the Remedial Investigation and complete the analysis of potentially responsible parties. The project completion is scheduled for FY 2010.

### **SHALLOW LAND DISPOSAL AREA, PA**

FY 2002 funds are being used to initiate a Remedial Investigation under the CERCLA process. FY 2003 funds will be used to continue the Remedial Investigation. The project completion schedule is being determined.